

What is Being Built?

■ Homepage
How will Access Change? ▶

ODOT proposes to construct a Diverging Diamond Interchange (DDI) at Memorial Drive (US-64) and the Creek Turnpike (US-64/US-169). This innovative interchange configuration enhances the operation of a traditional diamond by moving the arterial street traffic to the opposite side of the roadway at the on- and off-ramps. See More Information on Diverging
Diamonds, for general information on this type of interchange.

For the Memorial Drive and Creek Turnpike interchange, ODOT wanted to improve the congestion without affecting adjacent properties. The proposed DDI at this location will be a "retrofit" meaning it will be constructed within the existing interchange footprint. The existing bridge on the Creek Turnpike over Memorial Drive will remain in place, and no additional right-of-way will be purchased. The adjacent multi-use trail and current sidewalk connectivity will be enhanced by providing signalized crosswalks throughout the interchange.

You can view details of the design on the <u>Interactive map</u>. More information is provided below.

Use the map options to enhance your viewing.

- ∀iew the map legend
- **Example 1** Change the map background

- 母 Print a copy of the map
- Measure a distance on the map
- Add a comment to the map
 - +/- to zoom in and out
 - Type in an address to find a specific location



DIVERGE/CROSSOVER INTERSECTIONS

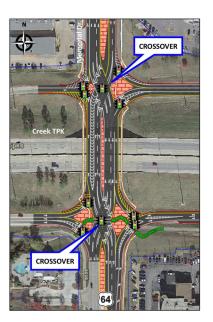
As traffic on Memorial Drive approaches the Creek Turnpike, vehicles will switch to the other side at signalized crossover intersections at the Turnpike ramps. This will allow left turns to function like right turns since the vehicle turning left will not have to cross traffic for ramp access. This type of an interchange can process left-turning traffic at higher rates than a traditional diamond interchange, which is critical at the Memorial interchange – particularly the left turn from the westbound off ramp. The Memorial DDI will also include dual right turn lanes at the south crossover to reduce traffic queues witnessed with the current configuration.

Diverging Diamond Interchange

- Diverge/Crossover at Ramps
- Signals at Crossovers



https://www.fhwa.dot.gov/publications/research/safety/07048/

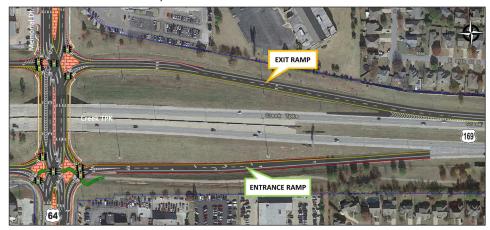


TWO LANE EXIT AND ENTRANCE RAMPS

The two largest traffic volume patterns at the Memorial Drive and Creek Turnpike interchange are 1) drivers coming from the south and turning east to get onto US-169, and 2) drivers coming from US-169 and turning south to head towards Bixby. Because of these heavy movements, the ramps on the east side of the interchange will be widened to two lanes.

❖ Two Lane Ramps on the East Side of the Interchange

- Exit Ramp From US-169 to Memorial Drive
- Entrance Ramp From Memorial to US-169



The videos below show a simulation of what today's traffic would look like with a Diverging Diamond Interchange.

Traffic Simulation: DDI Interchange (2020 AM Peak):

00:26

Traffic Simulation: DDI Interchange (2020 PM Peak):

00:26			

CONSTRUCTION

During construction, at least one lane of traffic will remain open on all ramps and two lanes of traffic are planned to remain open on Memorial Drive in each direction. Business access will be maintained near the existing driveways. A truck detour for certain phases of construction is being investigated and discussed with the City of Tulsa. See project timeline under the When Will this Project be Built? page.